L Number	Hits	Search Text	DB	Time stamp
1	1	("5747274").PN.	USPAT	2003/03/17 09:23
2	4	("4857453" | "4900662" | "5290678" | "5604105").PN.	USPAT	2003/03/17 09:14
3	11	5747274.URPN.	USPAT	2003/03/17 09:16
4	457	(diagnosis or determination or prognosis) adj5 (infarction or coronary)	USPAT	2003/03/17 09:28
5	10	((diagnosis or determination or prognosis) adj5 (infarction or coronary)) and choline	USPAT	2003/03/17 09:28
6	301	(diagnosis or determination or prognosis) adj5 (infarction or coronary)	JPO; DERWENT	2003/03/17 09:29
7	0	((diagnosis or determination or prognosis) adj5 (infarction or coronary)) and choline	JPO; DERWENT	2003/03/17 09:29
8	0	((diagnosis or determination or prognosis) adj5 (infarction or coronary)) and (choline or cholinesterase)	USPAT	2003/03/17 09:29
9	0	((diagnosis or determination or prognosis) adj5 (infarction or coronary)) and (choline or cholinesterase)	JPO; DERWENT	2003/03/17 09:30

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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Apr 08	"Ask CAS" for self-help around the clock
NEWS 3	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 4	Apr 09	ZDB will be removed from STN
NEWS 5	Apr 19	US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 6	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7	Apr 22	BIOSIS Gene Names now available in TOXCENTER
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NEWS 9	Jun 03	New e-mail delivery for search results now available
NEWS 10	Jun 10	MEDLINE Reload
NEWS 11	Jun 10	PCTFULL has been reloaded
NEWS 12	Jul 02	FOREGE no longer contains STANDARDS file segment
NEWS 13	Jul 22	USAN to be reloaded July 28, 2002; saved answer sets no longer valid
NEWS 14	Jul 29	Enhanced polymer searching in REGISTRY
NEWS 15	Jul 30	NETFIRST to be removed from STN
NEWS 16	Aug 08	CANCERLIT reload
NEWS 17	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18	Aug 08	NTIS has been reloaded and enhanced
NEWS 19	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 20	Aug 19	IFIPAT, IFICDB, and IFIUDB have been reloaded
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NEWS 46 Feb 24 TEMA now available on STN
NEWS 47 Feb 26 NTIS now allows simultaneous left and right truncation
NEWS 48 Feb 26 PCTFULL now contains images
NEWS 49 Mar 04 SDI PACKAGE for monthly delivery of multifile SDI results

NEWS EXPRESS January 6 CURRENT WINDOWS VERSION IS V6.01a,
CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
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NEWS INTER General Internet Information
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NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

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FILE 'HOME' ENTERED AT 09:35:56 ON 17 MAR 2003

=> file biosis
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'BIOSIS' ENTERED AT 09:36:08 ON 17 MAR 2003
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FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 12 March 2003 (20030312/ED)

=> file caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.84	1.05

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FILE COVERS 1907 - 17 Mar 2003 VOL 138 ISS 12
FILE LAST UPDATED: 16 Mar 2003 (20030316/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s (diagnosis or prognosis or determination) (5w) (coronary or infarction)
        107117 DIAGNOSIS
             1 DIAGNOSISES
          2011 DIAGNOSES
        108244 DIAGNOSIS
                  (DIAGNOSIS OR DIAGNOSISES OR DIAGNOSES)
         19930 PROGNOSIS
           325 PROGNOSES
         20141 PROGNOSIS
                  (PROGNOSIS OR PROGNOSES)
        560866 DETERMINATION
         13021 DETERMINATIONS
        573259 DETERMINATION
                  (DETERMINATION OR DETERMINATIONS)
       1299290 DETN
        125304 DETNS
       1378300 DETN
                  (DETN OR DETNS)
       1516947 DETERMINATION
                  (DETERMINATION OR DETN)
         47844 CORONARY
           205 CORONARIES
         47908 CORONARY
                  (CORONARY OR CORONARIES)
         22624 INFARCTION
           828 INFARCTIONS
         22878 INFARCTION
                  (INFARCTION OR INFARCTIONS)
L1        1250 (DIAGNOSIS OR PROGNOSIS OR DETERMINATION) (5W) (CORONARY OR
               INFARCTION)

=> s l1 and (choline)
         40813 CHOLINE
           367 CHOLINES
         40972 CHOLINE
                  (CHOLINE OR CHOLINES)
L2           2 L1 AND (CHOLINE)

=> d l2 ibib, iabs

L2   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2000:605201  CAPLUS
DOCUMENT NUMBER:          133:320426
TITLE:                    1H-NMR lipid profiles of human blood platelets; links
                          with coronary artery disease
AUTHOR(S):                Noula, C.; Bonzom, P.; Brown, A.; Gibbons, W. A.;
                          Martin, J.; Nicolaou, A.
CORPORATE SOURCE:         University-Industry Center for Pharmaceutical
                          Research, School of Pharmacy, University of London,
                          London, WC1N 1AX, UK
SOURCE:                   Biochimica et Biophysica Acta (2000), 1487(1), 15-23
                          CODEN: BBACAQ; ISSN: 0006-3002
PUBLISHER:                Elsevier Science B.V.
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
```

ABSTRACT:
Blood platelets are closely involved in the early development of atherosclerosis and in the events that lead to thrombosis, both of which are dominating factors in coronary artery disease (CAD). The aim of the present study was to evaluate the platelet lipid profiles of patients suffering from CAD and explore the possibility of a link between platelet lipids and CAD, using high-resoln. high-field proton NMR spectroscopy as the anal. tool. The total platelet lipid profiles of healthy volunteers were compared with those of patients presenting with chest pain requiring coronary angiog. Two lipid groups changed significantly: cholesterol increased by 16.5% and total diacylglycerophospholipids decreased by 15.7%. There was also a significant decrease of the ethanolamine-contg. phospholipids, by 4.7%; the extent of unsatn. of the fatty acid chains, by 0.2, and increase of the linoleate content of the fatty acid chains, by 1.9%. Our results suggest that platelet lipid abnormalities occur in patients with CAD and these changes may predate the development of overt atherosclerosis.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d l2 2 ibib, iabs

L2 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1954:72784 CAPLUS
DOCUMENT NUMBER: 48:72784
ORIGINAL REFERENCE NO.: 48:12952e-g
TITLE: Clinical studies in blood lipide metabolism. IX. Effect of lipotropic agents on serum lipide partitions in fifty patients with generalized atherosclerosis: A three year study
AUTHOR(S): Goldbloom, A. Allen; Eiber, Harold B.; Boyd, Linn J.
CORPORATE SOURCE: New York Med. Coll., New York, NY
SOURCE: Am. J. Digestive Diseases (1954), 21, 152-7
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
ABSTRACT:
cf. C.A. 48, 10200b. Thirty men and 30 women patients with the clinical ***diagnosis*** of generalized atherosclerosis and chronic **coronary** artery disease were maintained on a low-fat, low-cholesterol (I) diet for 36 months; 25 of them received a lipotropic prepn. contg. **choline**, methionine, inositol, vitamin B12 liver concn., and desiccated liver. I, phospholipides, total lipides, and neutral fats were detd. at 6-month intervals. The blood serum I of all patients decreased slightly. No significant differences in any of the other serum lipide fractions were observed. Conclusion: a low-fat, low-I diet will attain the same end result as lipotropic agents on reducing serum lipide partitions.

=> d l2 1 kwic

L2 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS
IT Phospholipids, biological studies
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(2-aminoethanol-contg.; 1H-NMR lipid profiles of human blood platelets in **diagnosis** of **coronary** artery disease)
IT Phospholipids, biological studies
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(**choline**-contg.; 1H-NMR lipid profiles of human blood platelets in **diagnosis** of **coronary** artery disease)
IT Artery, disease

(coronary; 1H-NMR lipid profiles of human blood platelets in **diagnosis** of **coronary** artery disease)

IT Fatty acids, biological studies
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(unsatd.; 1H-NMR lipid profiles of human blood platelets in **diagnosis** of **coronary** artery disease)

IT Atherosclerosis
Diagnosis
Platelet (blood)
(1H-NMR lipid profiles of human blood platelets in **diagnosis** of **coronary** artery disease)

IT Glycerophospholipids
Lipids, biological studies
Plasmalogens
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(1H-NMR lipid profiles of human blood platelets in **diagnosis** of **coronary** artery disease)

IT 57-88-5, Cholesterol, biological studies 60-33-3, 9,12-Octadecadienoic acid (9Z,12Z)-, biological studies
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(1H-NMR lipid profiles of human blood platelets in **diagnosis** of **coronary** artery disease)

```
=> s l1 and (choline or cholinesterase or plasmalogen)
         40813 CHOLINE
           367 CHOLINES
         40972 CHOLINE
                 (CHOLINE OR CHOLINES)
         20645 CHOLINESTERASE
          5515 CHOLINESTERASES
         21635 CHOLINESTERASE
                 (CHOLINESTERASE OR CHOLINESTERASES)
          1440 PLASMALOGEN
          1519 PLASMALOGENS
          2157 PLASMALOGEN
                 (PLASMALOGEN OR PLASMALOGENS)
L3           5 L1 AND (CHOLINE OR CHOLINESTERASE OR PLASMALOGEN)

=> d l3 not l2
L2 IS NOT VALID HERE
For an explanation, enter "HELP DISPLAY".

=> d l3 1-5 ibib, iabs

L3   ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:        2000:605201  CAPLUS
DOCUMENT NUMBER:         133:320426
TITLE:                   1H-NMR lipid profiles of human blood platelets; links
                         with coronary artery disease
AUTHOR(S):               Noula, C.; Bonzom, P.; Brown, A.; Gibbons, W. A.;
                         Martin, J.; Nicolaou, A.
CORPORATE SOURCE:        University-Industry Center for Pharmaceutical
                         Research, School of Pharmacy, University of London,
                         London, WC1N 1AX, UK
SOURCE:                  Biochimica et Biophysica Acta (2000), 1487(1), 15-23
                         CODEN: BBACAQ; ISSN: 0006-3002
PUBLISHER:               Elsevier Science B.V.
DOCUMENT TYPE:           Journal
LANGUAGE:                English
ABSTRACT:
```

Blood platelets are closely involved in the early development of atherosclerosis and in the events that lead to thrombosis, both of which are dominating factors in coronary artery disease (CAD). The aim of the present study was to evaluate the platelet lipid profiles of patients suffering from CAD and explore the possibility of a link between platelet lipids and CAD, using high-resoln. high-field proton NMR spectroscopy as the anal. tool. The total platelet lipid profiles of healthy volunteers were compared with those of patients presenting with chest pain requiring coronary angiog. Two lipid groups changed significantly: cholesterol increased by 16.5% and total diacylglycerophospholipids decreased by 15.7%. There was also a significant decrease of the ethanolamine-contg. phospholipids, by 4.7%; the extent of unsatn. of the fatty acid chains, by 0.2, and increase of the linoleate content of the fatty acid chains, by 1.9%. Our results suggest that platelet lipid abnormalities occur in patients with CAD and these changes may predate the development of overt atherosclerosis.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:744595 CAPLUS
DOCUMENT NUMBER: 126:14541
TITLE: Resting and reflex heart rate responses during cholinergic stimulation with pyridostigmine in humans
AUTHOR(S): Nobrega, A. C. L.; Carvalho, A. C. G.; Bastos, B. G.
CORPORATE SOURCE: Dep. Fisiologia, Univ. Federal Fluminense, Niteroi, 24210-130, Brazil
SOURCE: Brazilian Journal of Medical and Biological Research (1996), 29(11), 1461-1465
CODEN: BJMRDK; ISSN: 0100-879X
PUBLISHER: Associacao Brasileira de Divulgacao Cientifica
DOCUMENT TYPE: Journal
LANGUAGE: English
ABSTRACT:
Dysfunction of the autonomic nervous system is of prognostic value for sudden death after acute myocardial infarction. Although the use of .beta.-blockers to counteract the adrenergic hyperactivity has been shown to decrease mortality in these patients, there have been no reports on the role of cholinomimetic drugs in the **prognosis** of patients after myocardial ***infarction*** . The present study was designed to investigate the effect of the administration of pyridostigmine bromide, a reversible anti-***cholinesterase*** agent, on cardiac cholinergic activity assessed by the resting and reflex heart rate responses. Eight healthy volunteers were submitted to a conventional 12-lead ECG to obtain resting heart rate, and to three non-invasive cardiovascular tests: respiratory sinus arrhythmia, Valsalva maneuver and 4-s exercise test. On two different days and following a randomized cross-over double-blind protocol, the expts. were performed before and 120 min after oral administration of either pyridostigmine bromide (30 mg) or placebo. Pyridostigmine increased the duration of the R-R intervals at rest (pre: 898.+-.30 ms; post: 1019.+-.45 ms; pre-placebo: 916.+-.26 ms; post: 956.+-.28 ms). Although the duration of the R-R intervals during the autonomic tests was also increased, the derived indexes of maximal fluctuation during the maneuvers did not change. These results indicate that oral pyridostigmine produces tonic cardiac cholinergic stimulation while exerting no effect on its reflex changes. Further studies are needed to address the potential role of the administration of pyridostigmine in the **prognosis** of patients with acute myocardial **infarction**.

L3 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1985:22265 CAPLUS
DOCUMENT NUMBER: 102:22265
TITLE: Importance of the activity of serum enzymes in the **diagnosis** of myocardial **infarction**

and in assessment of liver function
AUTHOR(S): Makarevich, O. P.; Trakhtengerts, M. I.; Golikov, P. P.
CORPORATE SOURCE: NII Skoroi Pomoshchi im. Sklifosovskogo, Moscow, USSR
SOURCE: Laboratornoe Delo (1984), (10), 593-7
CODEN: LABDAZ; ISSN: 0023-6748
DOCUMENT TYPE: Journal
LANGUAGE: Russian
ABSTRACT:
The activity of the serum enzymes creatine phosphokinase (CPK), aspartate aminotransferase (AST), alanine aminotransferase (ALT), aldolase (ALD), ***cholinesterase*** (CE), total lactate dehydrogenase (LDH) and its isoenzymes was studied in 128 patients with large-focal myocardial infarction of various localizations and in 20 normal subjects. Manifest increases in the activity of CPK, LDH and its isoenzymes, AST, ALT, and, to a lesser degree, ALD and CE, was obsd. in patients already during the first day of disease. The activity of CPK, AST, LDH, and LDH1 normalized at various times after disease onset. Therefore, detn. of the activity of these enzymes may be valuable for early diagnosis and assessment of the disease severity, as well as for follow-up of the course of pathol. processes in the heart. Increased activity of ALT and the liver-specific LDH5 fraction was obsd., allowing the use of these tests for assessment of liver function in patients with large-focal myocardial infarction.

L3 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1958:17063 CAPLUS
DOCUMENT NUMBER: 52:17063
ORIGINAL REFERENCE NO.: 52:3103h-i
TITLE: Enzymes in **diagnosis** of heart **infarction**
AUTHOR(S): Wetzel, H.
CORPORATE SOURCE: Stadt. Krankenhaus, Ludwigshafen/Rhein, Germany
SOURCE: Med. Klin. (Munich) (1957), 52, 1326-31
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
ABSTRACT:
A review, discussing activity of various enzymes. Aldolase activity increases, serum adenosinetriphosphatase and lipoprotein lipase are not changed, whereas plasma **cholinesterase** decreases. 27 references.

L3 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1954:72784 CAPLUS
DOCUMENT NUMBER: 48:72784
ORIGINAL REFERENCE NO.: 48:12952e-g
TITLE: Clinical studies in blood lipide metabolism. IX. Effect of lipotropic agents on serum lipide partitions in fifty patients with generalized atherosclerosis: A three year study
AUTHOR(S): Goldbloom, A. Allen; Eiber, Harold B.; Boyd, Linn J.
CORPORATE SOURCE: New York Med. Coll., New York, NY
SOURCE: Am. J. Digestive Diseases (1954), 21, 152-7
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
ABSTRACT:
cf. C.A. 48, 10200b. Thirty men and 30 women patients with the clinical ***diagnosis*** of generalized atherosclerosis and chronic **coronary** artery disease were maintained on a low-fat, low-cholesterol (I) diet for 36 months; 25 of them received a lipotropic prepn. contg. **choline**, methionine, inositol, vitamin B12 liver concn., and desiccated liver. I, phospholipides, total lipides, and neutral fats were detd. at 6-month intervals. The blood serum I of all patients decreased slightly. No significant differences in any of the other serum lipide fractions were

observed. Conclusion: a low-fat, low-I diet will attain the same end result as lipotropic agents on reducing serum lipide partitions.

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	36.04	37.09

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-4.56	-4.56

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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Mar 7, 2003 (20030307/UP).

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NEWS 6	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7	Apr 22	BIOSIS Gene Names now available in TOXCENTER
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NEWS 9	Jun 03	New e-mail delivery for search results now available
NEWS 10	Jun 10	MEDLINE Reload
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NEWS 46	Feb 24	TEMA now available on STN

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 NEWS 47  Feb 26  NTIS now allows simultaneous left and right truncation
 NEWS 48  Feb 26  PCTFULL now contains images
 NEWS 49  Mar 04  SDI PACKAGE for monthly delivery of multifile SDI results

 NEWS EXPRESS  January 6 CURRENT WINDOWS VERSION IS V6.01a,
               CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
               AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

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FILE 'HOME' ENTERED AT 08:47:30 ON 17 MAR 2003

=> file biosis
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.21       0.21

FILE 'BIOSIS' ENTERED AT 08:47:37 ON 17 MAR 2003
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FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 12 March 2003 (20030312/ED)


=> s (coronary or infarction) and (choline or (trimethyl (w) ammonium) or
plamalogen)
        178778 CORONARY
           415 CORONARIES
        178876 CORONARY
                 (CORONARY OR CORONARIES)
        105945 INFARCTION
          4073 INFARCTIONS
        107179 INFARCTION
                 (INFARCTION OR INFARCTIONS)
         54523 CHOLINE
           439 CHOLINES
         54852 CHOLINE
                 (CHOLINE OR CHOLINES)
          4705 TRIMETHYL
         57574 AMMONIUM
            25 AMMONIUMS
         57589 AMMONIUM
                 (AMMONIUM OR AMMONIUMS)
           461 TRIMETHYL (W) AMMONIUM
             1 PLAMALOGEN
```

```
L1          335 (CORONARY OR INFARCTION) AND (CHOLINE OR (TRIMETHYL (W) AMMONIUM
                ) OR PLAMALOGEN)

=> s l1 and (diagnosis or determine or analysis or recognize or treat)
         560840 DIAGNOSIS
              4 DIAGNOSISES
          22534 DIAGNOSES
         571957 DIAGNOSIS
                   (DIAGNOSIS OR DIAGNOSISES OR DIAGNOSES)
         405239 DETERMINE
          16044 DETERMINES
         419654 DETERMINE
                   (DETERMINE OR DETERMINES)
        1240928 ANALYSIS
              9 ANALYSISES
         174903 ANALYSES
        1351186 ANALYSIS
                   (ANALYSIS OR ANALYSISES OR ANALYSES)
          26858 RECOGNIZE
          12415 RECOGNIZES
          38029 RECOGNIZE
                   (RECOGNIZE OR RECOGNIZES)
          30356 TREAT
           1143 TREATS
          31439 TREAT
                   (TREAT OR TREATS)
L2             44 L1 AND (DIAGNOSIS OR DETERMINE OR ANALYSIS OR RECOGNIZE OR TREAT
                )

=> d l2 1-44 kwic

L2   ANSWER 1 OF 44  BIOSIS  COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AB.  . . study was to characterise the neuroprotective activity of the novel
     glycineB site NMDA (N-methyl-D-aspartate) receptor antagonist MRZ 2/576
     (8-chloro-4-hydroxy-1-oxo-1,2-dihydropyridazino(4,5-b) quinolin-5-oxide
     choline salt, CAS 202807-80-5) in a rodent model of focal cerebral
     ischaemia. Since the solubility of MRZ 2/576 at a physiological. . .
     was initiated immediately after onset of MCAo. Neurological deficit was
     evaluated daily for 3 consecutive days and then brain infarct
     analysis was performed. MRZ 2/576 significantly improved the
     neurological score at 24 h and 72 h post stroke (p < 0.05. . .
     placebo). It also produced a 53.0% reduction of total infarct size, 60.4 %
     of cortical and 42.3 % of striatal infarction (p < 0.05 vs.
     placebo). Temporary drug-induced hypothermia and ataxia were observed
     during infusions. This leads to the conclusion that. . .
IT   . . .
        nervous system; middle cerebral artery: circulatory system, nervous
        system; striatum: nervous system
IT   Diseases
        ataxia: nervous system disease, toxicity; brain infarction:
        nervous system disease, vascular disease; hypothermia: metabolic
        disease, toxicity; neurological deficit: behavioral and mental
        disorders, nervous system disease; transient focal. . .

L2   ANSWER 2 OF 44  BIOSIS  COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
IT   Major Concepts
        Hematology (Human Medicine, Medical Sciences); Medical Genetics (Allied
        Medical Sciences); Metabolism
IT   Parts, Structures, & Systems of Organisms
          coronary artery: circulatory system; fibroblast; plasma:
        blood and lymphatics; spleen: blood and lymphatics, immune system
IT   Diseases
        CAD [coronary artery disease]: heart disease, vascular
        disease; Niemann-Pick Type B disease: behavioral and mental disorders,
        blood and lymphatic disease, diagnosis, genetic disease,
```

genetics, metabolic disease, nervous system disease; Tangier disease: genetic disease, genetics, metabolic disease; familial hypoalphalipoproteinemia: **diagnosis**, genetic disease, genetics, metabolic disease; hypertriglyceridemia: metabolic disease

IT Chemicals & Biochemicals
HDL-C [high-density lipoprotein-cholesterol]; apoA-1 [apolipoprotein A-1]: lipid acceptor; cholesterol: efflux, regulation; genomic DNA; phosphatidylcholine: efflux, regulation; sphingomyelin: efflux, regulation; tritiated-cholesterol; tritiated-**choline**

IT Alternate Indexing
Tangier Disease (MeSH); Hypertriglyceridemia (MeSH)

L2 ANSWER 3 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

IT . . .
Medicine, Medical Sciences); Radiology (Medical Sciences)

IT Parts, Structures, & Systems of Organisms
white matter: nervous system

IT Diseases
lacunar **infarction**: **diagnosis**, nervous system disease, symptomatic, vascular disease; vascular leukoencephalopathy: **diagnosis**, nervous system disease, vascular disease; vascular subcortical dementia: behavioral and mental disorders, nervous system disease, vascular disease

IT Chemicals & Biochemicals
N-acetylaspartate; **choline**; creatine-phosphocreatine

IT . . .
Fazekas criteria: evaluation method; Mini Mental Status Examination [MMSE]: evaluation method; proton magnetic resonance spectroscopy: diagnostic method

IT Miscellaneous Descriptors
N-acetylaspartate/**choline** ratio; N-acetylaspartate/creatine-phosphocreatine ratio; global cognitive function; Meeting Poster; Meeting Abstract

RN 62-49-7 (**CHOLINE**)

L2 ANSWER 4 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

TI Multi-variate **analysis** predicts clinical outcome 30 days after middle cerebral artery **infarction**.

AB. . . and purpose: To evaluate the functional prognostic value of proton magnetic resonance spectroscopy performed within the 5 days of an **infarction** of the middle cerebral artery territory, compared with previously demonstrated prognostic factors. Methods: Proton magnetic resonance spectroscopy was performed on 77 consecutive non-comatosed patients during the acute stage of middle cerebral artery **infarction**. The functional status was determined for each patient via the Orgogozo score. Proton magnetic resonance spectroscopic data were acquired in the **infarction** and in contra-lateral normal tissue and the results were expressed as metabolite ratios. Correlations were evaluated between the Orgogozo score at day 1 and day 30, the age, the sex, the volume of the **infarction**, and the metabolic ratios. Results: In a monovariate **analysis**, the decrease of the NAA/**choline** ratio was correlated with a low Orgogozo score at days 1 and 30 ($P < 0.05$) and with a large **infarction** ($P < 0.05$). A stepwise **analysis** showed a significant relationship between the Orgogozo score at day 30 and the Orgogozo score at day 1, the sex, the volume of **infarction**, and the NAA/Cho ratio within the **infarction**. Conclusions: Our work demonstrates that a good clinical outcome at day 30 depends on a good initial clinical score at day 1, a small volume of **infarction**, a small decrease of NAA/Cho, and being of the female gender.

IT . . .
Techniques

IT Parts, Structures, & Systems of Organisms
middle cerebral artery: circulatory system, nervous system

IT Diseases

middle cerebral artery **infarction**: nervous system disease, vascular disease

IT Chemicals & Biochemicals
N-acetyl-aspartate; **choline**

IT Methods & Equipment
Orgogozo score: analytical method; monovariate **analysis**: analytical method; proton magnetic resonance spectroscopy: imaging method

IT Miscellaneous Descriptors
N-acetyl-aspartate/**choline** ratio

RN 62-49-7 (**CHOLINE**)

L2 ANSWER 5 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

TI. . . concentration by magnetic resonance spectroscopy and initial infarct volume by MRI predicts outcome in patients with middle cerebral artery territory **infarction**.

AB. . . occurring in the brain in stroke. We used it to examine the relationship between metabolite concentration (N-acetyl aspartate (NAA), lactate, **cholines** and creatines), size of infarct, clinical deficit, and 3-month clinical outcome in patients with middle cerebral artery (MCA) territory **infarction**. Methods-Thirty-one patients with acute MCA territory **infarction** were recruited within 72 hours of the onset of symptoms. Single-voxel short echo time stimulated echo acquistion mode spectroscopy was. . . used to obtain metabolite data from the infarct core. Metabolite concentrations were determined with use of variable projection time domain-fitting **analysis**. Infarct size was determined with T2-weighted images. Patient outcome groups at 3 months were "independent," "dependent," or "dead." Results-All patients. . . no association between other metabolite concentrations and outcome. Conclusions-Infarct volume and NAA concentration can together predict clinical outcome in MCA **infarction** in humans.

IT Major Concepts
Biochemistry and Molecular Biophysics; Cardiovascular Medicine (Human Medicine, Medical Sciences)

IT Diseases
middle cerebral artery territory **infarction**: vascular disease

IT Chemicals & Biochemicals
cholines: metabolite concentration; creatine: metabolite concentration; lactate: metabolite concentration; N-acetyl aspartate: metabolite concentration

IT . . .
magnetic resonance spectroscopy: imaging method; stimulated echo acquistion mode spectroscopy: metabolite data, visualization method, single-voxel short echo time; time domain-fitting **analysis**: analytical method, measurement method; MRI [magnetic resonance imaging]: imaging method, imaging techniques

IT Miscellaneous Descriptors
clinical deficit; clinical outcome: three. . .

RN 6899-03-2Q (ASPARTATE)
56-84-8Q (ASPARTATE)
113-21-3 (LACTATE)
62-49-7D (**CHOLINES**)
57-00-1 (CREATINE)

L2 ANSWER 6 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AB Background and Purpose-Basic fibroblast growth factor (bFGF) and citicoline (cytidine 5'-diphosphate **choline**, an endogenous compound that stabilizes membrane function) have demonstrated neuroprotective effects after focal cerebral ischemia. Both agents are candidates for. . . of both (250 mg/kg citicoline and 10 mug/kg per hour bFGF). Triphenyltetrazolium chloride staining was used after 4 days to **determine** postmortem **infarction**. Neurological scores were assessed on a daily basis. Results-The premature mortality rate was 41.7% in the placebo and citicoline groups,. . . 4 was 3.1 +- 1.6 (placebo), 3.1 +- 1.6 (citicoline), 2.9+-1.5 (bFGF), and 2.4+-1.4

(combination) (P=NS). The mean volume of **infarction** was significantly reduced in the combination group (136.5-25.4 mm3) versus placebo (172.6+-48.9 mm3; P=0.036, Fisher test), versus citicoline alone (186.0+-35.7. . .

IT . . .
vascular disease, nervous system disease

IT Chemicals & Biochemicals
basic fibroblast growth factor [bFGF]: neuroprotective, synergistic effects; citocoline [cytidine 5'-diphosphate **choline**]: endogenous, membrane function, synergistic effects, neuroprotective; triphenyltetrazolium chloride: postmortem **infarction**, stain

IT Alternate Indexing
Cerebral Ischemia (MeSH); Cerebrovascular Disorders (MeSH)

RN 987-78-0 (CITICOLINE)
987-78-0 (CYTIDINE 5'-DIPHOSPHATE **CHOLINE**)
298-96-4 (TRIPHENYLTETRAZOLIUM CHLORIDE)

L2 ANSWER 7 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AB PURPOSE: To investigate with statistical **analysis** the relationship between brain injury measured with magnetic resonance (MR) imaging and that measured with proton (hydrogen-1) MR spectroscopy. MATERIALS. . . 6-60 years) with systemic lupus erythematosus (SLE) were examined with H-1 MR spectroscopy to measure N-acetylaspartate (NAA), creatine (Cr), and **choline** (Cho) levels in normal-appearing white matter and with MR imaging to detect anatomic abnormalities. RESULTS: Results of linear regression **analysis** revealed an association between the NAA/Cr ratio and anatomic abnormalities (P = .03). However, only small focal lesions were independently related to NAA/Cr ratio changes (P = .04). Results of a similar **analysis** showed associations between the Cho/Cr ratio and anatomic abnormalities (P = .002). An elevated Cho/Cr ratio and cerebral **infarction** were independently associated (P = .02), as were a decreased Cho/Cr ratio and severe cortical atrophy (P = .02). CONCLUSION:. . .

IT . . .
injury: injury, nervous system disease; systemic lupus erythematosus: connective tissue disease, immune system disease, neurological symptoms

IT Chemicals & Biochemicals
choline; creatine; N-acetylaspartate

IT . . . Equipment
magnetic resonance imaging: brain imaging method, diagnostic method; proton-magnetic resonance spectroscopy: brain imaging method, diagnostic method

IT Miscellaneous Descriptors
choline-creatine ratio; neurometabolism: abnormal; N-acetylaspartate-creatine ratio

RN 57-00-1 (CREATINE)
62-49-7 (**CHOLINE**)

L2 ANSWER 8 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

TI NGF prevents further atrophy of cholinergic cells of the nucleus basalis due to cortical **infarction** in adult post-hypothyroid rats but does not restore cell size compared to euthyroid rats.

AB. . . restore cross-sectional area of cholinergic cells of the nucleus basalis and (2) prevent further atrophy of these neurons following cortical **infarction**. In addition, we assessed the expression of p75-NGFR and p140-trkA mRNAs in the nucleus basalis cells of post-hypothyroid rats. Rats. . . treatment was interrupted and thyroxine levels were restored to normal by daily subcutaneous administration of physiological levels of thyroxine. Morphometric **analysis** identified atrophied nucleus basalis magnocellularis cholinergic cells at two ages, days 75 and 105, identified by in situ hybridization for p75-NGFR and p140-trkA mRNAs in methylene blue stained cells (day 75) and **choline** acetyltransferase immunostaining (day 105). The mean number of silver grains (pixels) per mu-m-2 (mean +- S.E.M.) of cell body cross-sectional. . .

IT . . .
Biology; Endocrine System (Chemical Coordination and Homeostasis); Enzymology (Biochemistry and Molecular Biophysics); Nervous System (Neural Coordination)
IT Chemicals & Biochemicals
CHOLINE ACETYLTRANSFERASE; PROPYLTHIOURACIL; THYROXINE
IT Miscellaneous Descriptors
CHOLINE ACETYLTRANSFERASE; CHOLINERGIC CELLS; CORTICAL **INFARCTION**; ENDOCRINE DISEASE/THYROID; ENDOCRINE SYSTEM; HYPOTHYROIDISM; MESSENGER RNA; MRNA; NEOCORTEX; NERVE GROWTH FACTOR; NERVE GROWTH FACTOR RECEPTORS; NERVOUS SYSTEM; NGF; NUCLEUS. . .
RN 9012-78-6 (**CHOLINE** ACETYLTRANSFERASE)
51-52-5 (PROPYLTHIOURACIL)
51-48-9 (THYROXINE)

L2 ANSWER 9 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AB. . . 6.50 mmol/l) diabetic male patients and 31 age- and body mass index-adjusted healthy normolipaemic male controls were studied. Cholesterol and **choline**-containing phospholipids were measured in total serum and two lipoprotein subfractions containing or not apo B (LpB and LpnoB respectively). These. . . profile (cholesterol and triglyceride levels), which was quite normal in plasma from patients as compared to controls, a depletion of **choline**-containing phospholipid content in serum and more specifically in LpB particles was observed in diabetic patients. Decreased cholesterol content was also observed in LpB particles. Immunological **analysis** demonstrated an increased number of lipoprotein particles (a condition previously related to **coronary** artery disease) and decreased immunoaccessibility of a conformationally expressed apo B-100 epitope. These conformational changes were correlated with modifications of. . .
IT Miscellaneous Descriptors
CHOLINE-CONTAINING PHOSPHOLIPIDS; SERUM CHOLESTEROL; TRIGLYCERIDES

L2 ANSWER 10 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI 99Tc-m-HMPAO SPET and 1H-MRS (proton magnetic resonance spectroscopy) in patients with ischaemic cerebral **infarction**.
AB Brain 99Tc-m-HMPAO single photon emission tomography (SPET) and 1H-MRS (proton magnetic resonance spectroscopy) were used to **determine** correlations between alterations in regional cerebral blood flow (rCBF) and changes in neuronal metabolites in 21 patients (28 examinations) with ischaemic cerebral **infarction** examined in different phases. rCBF was determined semi-quantitatively using Lassen's linearization algorithm. SPET provided evidence of the hypoperfused site of. . . stages. 1H-MRS was used to monitor the concentration of the following metabolites: N-acetyl-aspartate (NAA), creatine and phosphocreatine (CR+PCr), compounds containing **choline** (Cho) and lactate (Lac). A significant correlation was found between reduction in rCBF and a fall in NAA and Cr+PCr. . .
IT Miscellaneous Descriptors
CEREBRAL METABOLISM; CREATINE; DIAGNOSTIC-DRUG; ISCHEMIC CEREBRAL **INFARCTION**; LACTATE; N-ACETYL-ASPARTATE; PHOSPHOCREATINE; RADIOPHARMACEUTICAL; REGIONAL CEREBRAL BLOOD FLOW; SINGLE PHOTON EMISSION COMPUTED TOMOGRAPHY; TECHNETIUM-99M HEXAMETHYLPROPYLENEAMINE OXIME

L2 ANSWER 11 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AB. . . the series of subjects analyzed by the author. Findings support the hypothesis that plasma homocyst(e)ine is a risk factor for **coronary**, cerebral and peripheral arterial occlusive diseases, as well as for carotid thickening. Results of four studies show that heritability influences. . . Elevated levels of homocyst(e)ine can be decreased effectively by supplementary folate, occasionally requiring the addition of vitamin B-12, vitamin B-6, **choline** or betaine. Consequently, it is important that placebo-controlled clinical trials be

conducted to **determine** whether the clinical evolution of arterial occlusive diseases is influenced by those supplements.

L2 ANSWER 12 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI Mapping of lactate and N-acetyl-L-aspartate predicts **infarction** during acute focal ischemia: In vivo 1H magnetic resonance spectroscopy in rats.
AB. . . lactate, N-acetyl-L-aspartate (NAA), and other metabolite levels were determined by three-dimensional in vivo 1H magnetic resonance spectroscopy and single-voxel spectral **analysis** after middle cerebral artery occlusion in rats. Increased lactate was detected in the central ischemic region within 1.3 hours after. . . completely depleted after 24 hours. Results also demonstrated delayed depletion of all other magnetic resonance spectroscopy-visible 1H metabolites, including creatine, **choline**, and glutamate, after permanent occlusion. After 1 hour of temporary focal ischemia, lactate returned to nearly normal levels within 0.4. . . 72 hours, a recurrent increase in lactate and a new decrease in NAA were observed, suggesting delayed tissue injury. Histological **analysis**, performed in 10 rats, demonstrated infarcts that corresponded in distribution to regions of NAA depletion at 72 hours. These findings. . . In contrast, NAA depletion within 1.3 hours after the onset of ischemia identified central ischemic regions that were destined for **infarction**. Potential clinical applications include selection and monitoring of therapeutic intervention, as well as prediction of outcome, in patients with acute. . .
IT Major Concepts
Cardiovascular System (Transport and Circulation); Metabolism; Nervous System (Neural Coordination)
IT Chemicals & Biochemicals
LACTATE; ASPARTATE; CREATINE; **CHOLINE**; GLUTAMATE
IT Miscellaneous Descriptors
ACUTE STROKE; BIOCHEMICAL MARKER; **CHOLINE**; CREATINE; FOCAL CEREBRAL ISCHEMIA; GLUTAMATE; MIDDLE CEREBRAL ARTERY OCCLUSION; PMR SPECTROSCOPY; POTENTIAL THERAPY
RN 113-21-3 (LACTATE)
6899-03-2Q (ASPARTATE)
56-84-8Q (ASPARTATE)
57-00-1 (CREATINE)
62-49-7 (**CHOLINE**)
11070-68-1 (GLUTAMATE)

L2 ANSWER 13 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AB OBJECTIVE: The purpose of this study was to **determine** the feasibility of measuring concentrations of cerebral metabolites in acute and subacute stroke patients using single-voxel localized proton MR spectroscopy. . . in 14 stroke patients, at times ranging from 2 hr to 10 days following the onset of symptoms. Signals from **choline**, creatine, N-acetyl-L-aspartate (NAA), and lactate were quantified in the infarcted region (n = 14) and in the hemisphere contralateral to. . . 5.5 +- 3.2 mu-mol/g wet weight), compared with contralateral brain regions and control data in healthy volunteers. Significant reductions in **choline**, creatine, and NAA were also found in contralateral brain regions compared with the control patients. CONCLUSION: Quantitative single-voxel proton spectroscopy. . . studies of acute stroke. Ratio measurements or comparison with contralateral metabolites may be misleading because all metabolites may change during **infarction**, and contralateral metabolite levels may also be different from normal subjects.
IT . . .
(Human Medicine, Medical Sciences); Clinical Chemistry (Allied Medical Sciences); Metabolism; Morphology; Neurology (Human Medicine, Medical Sciences)
IT Chemicals & Biochemicals
CHOLINE; CREATINE; ASPARTATE; LACTATE
IT Miscellaneous Descriptors

CEREBRAL INFARCT; **CHOLINE**; CREATINE; LACTATE; MAGNETIC RESONANCE SPECTROSCOPY; N-ACETYL-L-ASPARTATE

RN 62-49-7 (**CHOLINE**)
57-00-1 (CREATINE)
6899-03-2Q (ASPARTATE)
56-84-8Q (ASPARTATE)
113-21-3 (LACTATE)

L2 ANSWER 14 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AB With the aim of a search for possible platelet related predictors of myocardial **infarction** development in unstable angina multifactorial discriminant **analysis** of relationship of platelet function characteristics to results of one year follow-up of 121 patients was performed. Nineteen parameters reflecting. . . platelet functions - aggregation in vivo and in vitro, lipid composition of and lipid peroxidation in platelets were included into **analysis**. The following 4 parameters had discriminating power in relation to myocardial **infarction** development (n=37) and sudden death (n=3) during follow-up: lipid peroxidation products (diene conjugates), free cholesterol fraction and platelet phospholipids - phosphatidyl **choline** and sphingomyelin. Frequency of correct retrospective predictions when all these parameters were included into model was 70%. Best coincidence of. . . predicted and observed results of follow up (76%) was achieved with the use of 3 parameters - free cholesterol, phosphatidyl **choline** and sphingomyelin in platelets.

IT Miscellaneous Descriptors
CHOLESTEROL; LIPID PEROXIDATION; MULTIFACTOR DISCRIMINANT **ANALYSIS**; MYOCARDIAL **INFARCTION** PREDICTION; PHOSPHOLIPIDS; SUDDEN DEATH

L2 ANSWER 15 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

TI Continuing ischemic damage after acute middle cerebral artery **infarction** in humans demonstrated by short-echo proton spectroscopy.

AB. . . to study the ischemic penumbra in humans by measuring the metabolic changes that occur after a middle cerebral artery territory **infarction**. Methods: Diagnostic MRI and short-echo time MR spectroscopy were performed on a 1.5-T system. Localized proton MR spectroscopy was performed within the area of cerebral **infarction** and in a homologous area of the contralateral hemisphere. The residual water resonance in the spectra was removed with the. . . singular value decomposition method, after which peak area estimates were obtained by means of the variable projection time domain fitting **analysis**. The unsuppressed water signal was used as an internal concentration standard. Ten patients with acute middle cerebral artery **infarction** were studied within 28 hours of stroke onset and followed up for a period of up to 3 months. Results:. . . but not detected in the contralateral hemisphere. N-Acetyl aspartate, a neuronal marker, and total creatine were significantly reduced. The initial **choline** signal, arising from **choline**-containing compounds within the cell and cell membrane, remained unchanged in the infarct core compared with the contralateral hemisphere. Further reductions. . . the lactate concentration was seen within the infarct core during the first 7 to 10 days. Similar reductions in the **choline** concentration were observed during this period. Conclusions: The demonstration of the continuing loss of cerebral metabolites within an infarct region suggests that further cell loss occurs up to 10 days after **infarction**. The continuing loss of neurons may represent continued ischemic damage after middle cerebral artery **infarction**.

IT Miscellaneous Descriptors
CEREBRAL METABOLITE LOSS; CONTINUED CELL LOSS; **DIAGNOSIS**; MAGNETIC RESONANCE IMAGING

L2 ANSWER 16 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

TI Magnesium antagonizes the actions of lysophosphatidyl **choline** (LPC) in myocardial cells: A possible mechanism for its antiarrhythmic effects.

AB Patients with cardiac arrhythmias, ischemia, and **infarction** may benefit from administration of supplemental magnesium. However, the exact mechanisms for magnesium's beneficial effects remain unknown. Lysophosphatidyl **choline** (LPC), an amphipathic phospholipid released from cardiac cell membranes during ischemia, increases free intracellular calcium concentrations ((Ca)-i) and has been implicated as a cause of cardiac arrhythmias and **coronary** artery spasm during myocardial ischemia. We postulated that magnesium acts by inhibiting cellular calcium overload induced by mediators such as. . . suspended in modified Dulbecco's phosphate buffered saline solution with 0.2, 2.0, and 20 mM magnesium chloride. Differences were determined by **analysis** of variance with P lt 0.05 considered significant. LPC significantly increased (Ca)-i in the 100 mu-M (506 +- 76 nM). . .

IT Major Concepts
Cardiovascular System (Transport and Circulation); Cell Biology; Metabolism; Pharmacology

IT Chemicals & Biochemicals
MAGNESIUM; **CHOLINE**; CALCIUM

RN 7439-95-4 (MAGNESIUM)
62-49-7 (**CHOLINE**)
7440-70-2 (CALCIUM)

L2 ANSWER 17 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AB. . . disulfide) and mainly bound to proteins. Concentrations of total HCY, or homocyst(e)ine (H(e)), are increased in 15-40% of patients with **coronary**, cerebral, or peripheral arterial diseases. Such association of H(e) with arterial occlusive diseases has been documented in retrospective, cross-sectional, and. . . are also increased in subjects having thickened carotid arteries, as determined by ultrasonography, and who are asymptomatic for atherosclerosis. Statistical **analyses** of data from several series of patients demonstrate that H(e) concentrations are associated with **coronary** artery disease, independently from most other risk factors for atherosclerosis. The increased concentrations of H(e) are readily corrected by folic acid, occasionally supplemented with pyridoxine, vitamin B-12, **choline** , or betaine. Whether these supplements affect the evolution of atherosclerotic disease needs to be established by prospective, placebo-controlled clinical trials.

L2 ANSWER 18 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

TI Neocortical **infarction** in subhuman primates leads to restricted morphological damage of the cholinergic neurons in the nucleus basalis of Meynert.

AB The aim of the present study was to investigate the long-term effect of cortical **infarction** on the subhuman primate (Cercopithecus aethiops) basal forebrain. The lesion. carried out by cauterizing the pial blood vessels supplying the left fronto-parieto-temporal neocortex, induced retrograde degenerative processes within the ipsilateral nucleus basalis of Meynert. The morphometrical **analysis** revealed that significant shrinkage of cholinergic neurons and loss of neuritic processes were localized within the intermediate regions of the nucleus basalis. The average cross-sectional areas of **choline** acetyltransferase-immunoreactive neurons in the intermedio-ventral (Ch4iv) and intermedio-dorsal (Ch4id) nucleus basalis were decreased to 62.5 +- 9.5 and 58.0 +-. . . sham-operated values. Although an apparent loss of Nissl-stained magnocellular neurons in Ch4iv and Ch4id was found by applying a quantitative **analysis** based on a perikaryal-size criterion, data obtained by the quantification of immunostained material failed to reveal any significant decrease of. . .

IT . . .
System (Chemical Coordination and Homeostasis); Enzymology (Biochemistry and Molecular Biophysics); Morphology; Nervous System

(Neural Coordination)
IT Chemicals & Biochemicals
ACETYLCHOLINE; **CHOLINE** ACETYLTRANSFERASE
IT Miscellaneous Descriptors
ACETYLCHOLINE; BASAL FOREBRAIN; **CHOLINE** ACETYLTRANSFERASE; ISCHEMIA; NEOCORTEX; NERVE GROWTH FACTOR; NEURODEGENERATION; NEUROPROTECTION
RN 51-84-3 (ACETYLCHOLINE)
9012-78-6 (**CHOLINE** ACETYLTRANSFERASE)

L2 ANSWER 19 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI Distinctive case: Glycogen storage disease associated with Niemann-Pick disease: Histochemical, enzymatic, and lipid **analyses**.
AB. . . In addition, many adenomatous lesions were found at the microscopical level. The spleen weighed 1310 g, and showed two small **infarctions** at the upper part. A histological examination showed a diffuse infiltration of large foamy cells in the splenic red pulp.. . . of Niemann-Pick disease. These foamy cells were also found in liver, bone marrow, lymph nodes, kidneys, and lungs. A lipid **analysis** using thin-layer chromatography showed that, compared to normal spleen tissue, there was a marked increase in cholesterol, phosphatidyl ethanolamine, phosphatidyl **choline** (lecithin), and sphingomyelin, and a slight increase in free fatty acids and cholesterol ester. Sphingomyelinase activity assayed from the frozen. . .

L2 ANSWER 20 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AB. . . acid contents in the cerebral cortex, striatum and hippocampus of both hemispheres were determined. The TTC-unstained area, a measure of **infarction**, was developed in the right hemisphere by the 3rd day after the embolism, which was similar to that on the. . . time after the operation. Minor metabolic changes were observed in the left hemisphere. The results suggest that microsphere-embolism induces cerebral **infarction** and/or sustained damage to acetylcholine and neurotransmitter amino acid synthesis and/or catabolism of the brain regions. This model may provide information concerning the pathophysiological alterations in long-term cerebral ischemia and **infarction**.
IT . . .
and Circulation); Endocrine System (Chemical Coordination and Homeostasis); Metabolism; Nervous System (Neural Coordination)
IT Chemicals & Biochemicals
ACETYLCHOLINE; TRIPHENYLTETRAZOLIUM CHLORIDE; **CHOLINE**
IT Miscellaneous Descriptors
ANTERIOR CINGULATE; BENZODIAZEPINE; CAUDATE; COMPUTED TOMOGRAPHY; CORTICAL UPTAKE; DIAGNOSTIC-DRUG; DIFFERENTIAL **DIAGNOSIS**; FRONTAL CORTEX; GENDER DIFFERENCE; TECHNETIUM-99M EXAMETAZIME; TEMPORAL CORTEX; THALAMUS; TRANQUILIZER AGENT
RN 51-84-3 (ACETYLCHOLINE)
298-96-4 (TRIPHENYLTETRAZOLIUM CHLORIDE)
62-49-7 (**CHOLINE**)

L2 ANSWER 21 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI. . . protective effects of human recombinant nerve growth factor and monosialoganglioside GM1 treatment on primate nucleus basalis cholinergic neurons after neocortical **infarction**.
AB Neocortical **infarction** induces biochemical and morphological retrograde degenerative changes in cholinergic neurons of the rat nucleus basalis magnocellularis (Sofroniew et al. (1983). . . or in combination with the monosialoganglioside GM1. Six months after surgery and treatment, the monkeys were processed either for biochemistry (**choline** acetyltransferase assay) or immunocytochemistry. In lesioned vehicle-treated animals, **choline** acetyltransferase activity significantly deceased by 28% in the cortex surrounding the injured area and by 31% in the ipsilateral nucleus. . . were fully prevented with the administration of nerve growth factor alone or in combination with the

monosialoganglioside GM1. The morphometrical **analysis** revealed a significant shrinkage of cholinergic neurons (61 +- 1.4% of sham-operated cell size) and loss of neuritic processes (59. . .

IT . . .
System (Chemical Coordination and Homeostasis); Enzymology (Biochemistry and Molecular Biophysics); Nervous System (Neural Coordination); Pharmacology

IT Chemicals & Biochemicals
GM1; **CHOLINE** ACETYLTRANSFERASE

IT Miscellaneous Descriptors
CHOLINE ACETYLTRANSFERASE; HORMONE-DRUG; THERAPY

RN 37758-47-7Q (GM1)
52930-43-5Q (GM1)
104443-62-1Q (GM1)
136783-04-5Q (GM1)
136797-21-2Q (GM1)
146701-96-4Q (GM1)
9012-78-6 (**CHOLINE** ACETYLTRANSFERASE)

L2 ANSWER 22 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

TI Proton magnetic resonance spectroscopy of human brain: Applications to normal white matter, chronic **infarction**, and MRI white matter signal hyperintensities.

AB A modified ISIS method, for image-selected localized proton magnetic resonance spectroscopy (1H MRS), was used to **determine** the ratios and T-2 relaxation times of proton metabolites in normal subjects and in patients with chronic **infarction** and MRI white matter signal hyperintensities (WMSH). First, in patients with cerebral **infarctions**, increased concentrations of lactate were found in the majority of patients, and N-acetyl aspartate (NAA) was reduced to a significantly greater extent than **choline** (Cho) or creatine (Cre). For TE = 270 ms, the raw ratios of Cho/NAA, Cre/NAA, and Lac/NAA were significantly (P. . . in patients with WMSH, no significant change of the proton metabolite concentrations could be detected with the exception of the **choline** which was significantly (P = 0.003) altered. The Cho/NAA ratio, after T-2 and excitation profile correction, increased from 0.47 +-. . . normal group to 0.64 +- 0.05 in the WMSH group. Third, in normal white matter, the concentration of N-acetyl aspartate, **choline**, and lactate was estimated to 11.5, 2.0 and 0.6 mM, respectively, by assuming a total creatine concentration of 10 mM.

IT . . .
System (Transport and Circulation); Nervous System (Neural Coordination); Neurology (Human Medicine, Medical Sciences); Radiology (Medical Sciences)

IT Chemicals & Biochemicals
CHOLINE; CREATINE

IT Miscellaneous Descriptors
ANALYTICAL METHOD; **CHOLINE**; CREATINE; MAGNETIC RESONANCE IMAGING; METHOD APPLICATION; N=ACETYLASPARTATE; PMR

RN 62-49-7 (**CHOLINE**)
57-00-1 (CREATINE)

L2 ANSWER 23 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

TI EFFECT OF CYTIDINE DIPHOSPHATE **CHOLINE** ON ANOXIA TOLERANCE OF CULTURED MYOCARDIAL CELLS.

AB. . . (10 treated and 10 controls .times. 3) were examined with a laser contractionmeter in a special chamber for anoxia to **determine** whether cytidine diphosphate **choline** (CDPC), a membrane phospholipid precursor, can protect against total oxygen deprivation. Heart rate and force of contraction (inotropism) were monitored. . .

IT Miscellaneous Descriptors
RAT CARDIOVASCULAR-DRUG ANOXIA INOTROPISM MYOCARDIAL **INFARCTION** CARDIOPULMONARY BYPASS LASER CONTRACTIONMETER

RN 987-78-0 (CYTIDINE DIPHOSPHATE **CHOLINE**)

L2 ANSWER 24 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AB. . . 1.5-T magnetic resonance systems. In this study we evaluated the usefulness of combined magnetic resonance imaging and spectroscopy on the **diagnosis** of acute and chronic **infarctions**. Methods: Combined magnetic resonance imaging and spectroscopy investigations were carried out with a 1.5-T system in 16 volunteers, eight patients with chronic **infarction** (> 8 months), and 10 patients with acute ischemic stroke (< 8 hours). We used a stimulated echo sequence of acquire localized spectra from image-guided volumes of interest (16-27 ml). Results: There were no significant interindividual differences of **choline**, creatine, phosphocreatine, and N-acetyl aspartate resonances in the spectra from volunteers. In chronic **infarctions** N-acetyl aspartate was descreased in relation to **choline**. Acute ishemic **infarctions** were characterized by decreased N-acetyl aspartate resonances and elevation of lactate. Conclusions: The study demonstrates the feasibility of proton spectroscopy. . .
IT Miscellaneous Descriptors
HUMAN N ACETYLASPARTATE **CHOLINE** CREATINE LACTATE PHOSPHOCREATINE CHRONIC **INFARCTION** METABOLIC ALTERATION ISCHEMIA DIAGNOSTIC METHOD PMR
RN 57-00-1 (CREATINE)
62-49-7 (**CHOLINE**)
67-07-2 (PHOSPHOCREATINE)
113-21-3 (LACTATE)

L2 ANSWER 25 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AB. . . of human brain was carried out on 15 healthy volunteers and 2 patients suffering from a brain tumour and an **infarction**, respectively. The measurements were performed on a whole body MR system, operating at 1.5 tesla using the stimulated echo technique.. . . within a total measurement time of one hour. The dominant peaks in the spectra from healthy volunteers are N-acetyl aspartate, **choline** and creatine/phosphocreatine. The spectra obtained from the brain tumour and the infarct, respectively, differed very much from those obtained in. . .
IT Miscellaneous Descriptors
N ACETYLASPARTATE **CHOLINE** CREATININE PHOSPHOCREATININE BRAIN TUMOR **INFARCTION** DIFFERENTIAL **DIAGNOSIS**
RN 60-27-5 (CREATININE)
62-49-7 (**CHOLINE**)
5786-71-0 (PHOSPHOCREATININE)

L2 ANSWER 26 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI SUBENDOCARDIAL **INFARCTION** PRODUCES EPICARDIAL PARASYMPATHETIC DENERVATION IN CANINE LEFT VENTRICLE.
AB Forty dogs underwent anterior descending **coronary** artery dissection with most having occlusion that was either maintained or reperfused. Study was performed 1-4 days later. Multipole electrodes placed in normal and ischemic zones were used to **determine** the depth of the epicardial rim overlying a subendocardial **infarction** . This was done by comparing voltage differential with respect to time (dV/dt) measurements of sequential bipolar electrograms along each needle. By this means, test sites with a rim were documented, and depths of epicardial biopsies for **choline** acetyltransferase were chosen. Epicardial effective refractory period (ERP) responses to vagal nerve stimulation were measured. In sham-operated controls, vagal stimulation prolonged ERP, and **choline** acetyltransferase activity was equivalent in all sites. In contrast, dogs with all durations of **coronary** occlusion and various thicknesses of subendocardial **infarction** had no significant prolongation of ERP limted to rim sites overlying the infarct during vagal nerve stimulation. Corresponding **choline** acetyltransferase activity was decreased in rim sites compared with remote areas. In addition, dogs given norepinephrine or physostigmine (to potentiate parasympathetic responses) did not demonstrate significant ERP prolongation with vagal stimulation. Infusion

of acetylcholine into the distal ligated **coronary** artery produced dose-dependent prolongation of ERP in sites overlying the infarct. These data taken together support the hypothesis that subendocardial **infarction**, regardless of its homogeneity or thickness, produces parasympathetic denervation of the overlying epicardial rim.

L2 ANSWER 27 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AB Removing sodium from standard ionic contrast media markedly increases the incidence of ventricular fibrillation in patients undergoing **coronary** angiography. Newer nonionic contrast media, Iopamidol (IOP), Iohexol (IOH) and Ioversol (IOV), contain only trace amounts of sodium. To **determine** whether sodium influences the fibrillatory propensity of nonionic contrast media, we measured the prolongation in QT interval and performed programmed. . . 11 with 0.9% SaCl/IOP (P < 0.001). Similar results were observed with IOH and IOV. Unlike NaCl, the addition of **choline** chloride or dextrose did not increase ventricular fibrillation or QT interval prolongation. It is concluded that standard preparations of nonionic. . .
IT Miscellaneous Descriptors
DOG IOPAMIDOL IOHEXOL IOVERSOL DIAGNOSTIC-DRUG VENTRICULAR FIBRILLATION **CORONARY** ANGIOGRAPHY PROGRAMMED ELECTRICAL STIMULATION

L2 ANSWER 28 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AB Removing sodium from standard ionic contrast media markedly increases the incidence of ventricular fibrillation in patients undergoing **coronary** angiography. Newer nonionic contrast media, iopamidol, iohexol, and ioversol contain only trace amounts of sodium. To **determine** whether sodium attenuates or potentiates ventricular fibrillation from nonionic contrast media, we measured the prolongation in QT interval and performed. . . eight of 11 with 0.9% NaCl/iopamidol (P < .001). Similar results were observed with iohexol and ioversol. The addition of **choline** chloride or dextrose did not increase ventricular fibrillation and QT interval prolongation. It is concluded that standard preparation of nonionic. . .

L2 ANSWER 29 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI PROTON NMR SPECTROSCOPY IN CANINE MYOCARDIAL **INFARCTION**.
AB. . . to study the relationship between proton relaxation times and other resonances in the proton spectra, such as lipids, creatine, and **choline**/carnitine in subacute (8-day-old) myocardial **infarctions**. Eight mongrel dogs received operative ligation of the left anterior descending **coronary** artery (four were permanently occluded, four were occluded for 1 h and reperfused) and were sacrificed 8 days later so. . . the core of infarcted tissue) the lipids do not contribute directly to the increased bulk relaxation times associated with myocardial **infarction** and that the lipid peaks (2.3, 1.2, 0.8 ppm) and creatine peak (3.0 ppm) are more specific to the kind of infarct than to the relaxation times. Therefore, **analysis** of the proton spectrum of myocardial tissue may serve as a method for tissue characterization.
IT Miscellaneous Descriptors
LIPIDS CREATINE **CHOLINE** CARNITINE
RN 57-00-1 (CREATINE)
62-49-7 (**CHOLINE**)
541-15-1 (CARNITINE)

L2 ANSWER 30 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI HIGH DENSITY LIPOPROTEIN FREE CHOLESTEROL AND OTHER LIPIDS IN **CORONARY** HEART DISEASE.
AB The cholesterol and **choline**-containing phospholipid fractions of high density lipoproteins (HDL) were determined in healthy males and in male patients with **coronary** heart disease (CHD) to ascertain which HDL parameter or combined parameters possess the greatest discriminative power. The free cholesterol fraction. . . being 6.6

(.+-. 0.9) and 4.4 (.+-. 0.6) mg/dl, respectively. Classification of CHD patients and controls using one-variable discriminant function **analysis** (DFA) yielded an error rate of 27% for plasma HDL-fc. Two variable DFA using both the HDL esterified cholesterol levels. . .

IT Miscellaneous Descriptors
HUMAN RISK PREDICTOR **CHOLINE**-CONTAINING PHOSPHOLIPID

RN 57-88-5 (CHOLESTEROL)
62-49-7 (**CHOLINE**)

L2 ANSWER 31 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

TI TIME COURSE OF CHANGES IN CANINE MYOCARDIAL PLASMALOGEN LEVELS DURING **INFARCTION**.

AB The 1-alk-1'-enyl-2-acyl-sn-glycerophospholipids (plasmalogens) are major components of the myocardial phospholipids. This study was performed to **determine** the early metabolic effect of myocardial ischemia on plasmalogen. Canine **coronary** artery was occluded by injection of agar gel into the left anterior descending artery using Sones catheter. The heart was. . . Phospholipid ocmposition of ischemic myocardium at 1, 3 and 6 hr, decreased by only 10% in the major fractions (phosphatidyl **choline**, phosphatidyl ethanolamine and **choline** plasmalogen), while ethanolamine plasmalogen decreased by 18%, 22% and 20% at 1, 3 and 6 hr. respectively. The sn-2 hydroxyl. . .

L2 ANSWER 32 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

TI ACETYLGLYCERYL ETHER PHOSPHORYL **CHOLINE** A PUTATIVE MEDIATOR OF CARDIAC ANAPHYLAXIS IN THE GUINEA-PIG.

AB. . . synthetic platelet-activating factor, causes ECG changes in the rabbit similar to those which are characteristic manifestations of systemic anaphylaxis. To **determine** whether platelet-activating factor contributes to anaphylactic cardiac dysfunction, platelet-activating factor release from the sensitized guinea pig heart challenged in vitro. . . phosphorylcholine into nonsensitized hearts. Evidently, during anaphylaxis in the isolated guinea pig heart, a platelet-activating factor is released into the **coronary** effluent that has physicochemical and functional properties similar to those of acetyl glyceryl ether phosphorylcholine. The intracardiac administration of acetyl. . . ether phosphorylcholine (10-14 to 3 .times. 10-9 M) induced dose-related decreases in left ventricular contractile force (-5 to -85%) and **coronary** flow (-5 to 85%), as well as impaired atrioventricular conduction. The negative inotropic effect of acetyl glyceryl ether phosphorylcholine also was present in hearts perfused at constant flow. Although, in these hearts, acetyl glyceryl ether phosphorylcholine increased **coronary** resistance, which may have caused regional shunting and ischemia, it is unlikely that the negative inotropic effect of acetyl glyceryl ether phosphorylcholine was secondary to changes in **coronary** flow, since acetyl glyceryl ether phosphorylcholine also caused a dose-dependent negative inotropic effect in the electrically paced, noncoronary-perfused left atrium. . . by various cyclooxygenase or lipoxygenase products of the arachidonic acid cascade. Platelet-activating factor may contribute to the contractile failure, reduced **coronary** flow and conduction arrhythmias of cardiac anaphylaxis.

RN 53-86-1 (INDOMETHACIN)
107-73-3 (PHOSPHORYL **CHOLINE**)
40785-97-5 (7-3-4 ACETYL-3-HYDROXY-2-PROPYLPHENOXY-2-HYDROXYPROPOXY-4-OXO-8-PROPYL-4H-1 BENZOPYRAN-2-CARBOXYLIC-ACID)
40786-08-1 (FPL-55712)
65154-06-5Q, 74389-68-7Q, 74389-69-8Q (PLATELET ACTIVATING FACTOR)

L2 ANSWER 33 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AB To **determine** the pharmacodynamic profile of mono-iso-propyl-disopyramide (MIP), a major metabolite of disopyramide, experiments were carried out using rats, guinea pigs and beagle dogs. At 24 h after **coronary** ligation, i.v. MIP suppressed ventricular arrhythmia induced by 2-stage **coronary** artery ligation in unanesthetized

dogs. The mean and standard error of the i.v. antiarrythmic dose for MIP was 6.8 .+-.. . .

IT Miscellaneous Descriptors
RAT GUINEA-PIG DOG CARDIOVASCULAR-DRUG DIURETIC-DRUG ACETAZOLAMIDE DISOPYRAMIDE PHOSPHATE VENTRICULAR ARRHYTHMIA SODIUM EXCRETION CHLORIDE EXCRETION ACETYL **CHOLINE** ANTAGONISM CALCIUM ANTAGONISM NOREPINEPHRINE ANTAGONISM

RN 51-41-2 (NOREPINEPHRINE)
51-84-3 (ACETYL **CHOLINE**)
59-66-5 (ACETAZOLAMIDE)
7440-23-5 (SODIUM)
7440-70-2 (CALCIUM)
16887-00-6 (CHLORIDE)
22059-60-5 (DISOPYRAMIDE PHOSPHATE)
38236-46-3 (MONO ISO PROPYL DISOPYRAMIDE)

L2 ANSWER 34 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI LOW DIETARY INTAKE OF LINOLEIC-ACID PREDISPOSES TO MYO CARDIAL **INFARCTION**.
AB Men (32) who had recently had a myocardial **infarction** were matched individually for age with controls who had no evidence of heart disease. The patients had a significantly lower proportion of linoleic acid and a higher proportion of palmitic acid in their plasma triglyceride fatty acids. **Analysis** of the composition of red-cell membrane phosphatidyl **choline**, which reflects long-term dietary fat intake, showed a significantly lower proportion of linoleic acid in the patients.

IT Miscellaneous Descriptors
HUMAN PHOSPHATIDYL **CHOLINE** ISCHEMIC HEART DISEASE PALMITIC-ACID PLASMA TRI GLYCERIDE FATTY-ACIDS

L2 ANSWER 35 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AB Hypothyroidism alters the responsiveness of sympathetically innervated structures. The present work was done to **determine** if the responsiveness of the intrinsic cardiac nerves (ICN) to nicotine is also affected by thyroidectomy (THX). Mongrel dogs were. . . for recording His bundle activity (HB). A 2nd cannula was placed into the carotid artery with its tip near the **coronary** ostia, so that the responses to the drugs injected would be confined to the heart. Changes in the A-H interval. . .

IT Miscellaneous Descriptors
NICOTINE HYDRO CHLORIDE ACETYL **CHOLINE** METOPROLOL AUTONOMIC-DRUG CARDIOVASCULAR-DRUG HIS BUNDLE HYPO THYROIDISM

RN 51-84-3 (ACETYL **CHOLINE**)
2820-51-1 (NICOTINE HYDRO CHLORIDE)
37350-58-6 (METOPROLOL)

L2 ANSWER 36 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AB. . . varied between increased and decreased afterload by intra-aortic infusion of angiotensin and acetylcholine. Intact ventricular performance was measured by computer-based **analysis** of biplane left ventriculograms. Myocardial blood and flow distribution was determined by radioactive microspheres, and O2 consumption was measured by **coronary** arteriovenous O2 difference times blood flow. When left ventricular systolic pressure rose, tension-time index, stress-time index, stroke work and minute. . .

IT Miscellaneous Descriptors
DOG HUMAN ACETYL **CHOLINE** ANGIOTENSIN HORMONE-DRUG CARDIOVASCULAR-DRUG COMPUTER

RN 51-84-3 (ACETYL **CHOLINE**)
1407-47-2 (ANGIOTENSIN)
7782-44-7 (OXYGEN)

L2 ANSWER 37 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AB. . . study of ischemic and necrotic areas by special stains (nitroblue

tetrazolium and Barbeito-Lopez trichromic stain); serial transverse study of the **coronary** tree; and careful search for acute and chronic lesions of the conducting system in serial sections. The basic lesion in cardiac SD is diffuse and extensive atherosclerotic **coronary** disease. This lesion is not a determinant of the acute episode of SD. **Coronary** thrombosis was not a common finding. Conversely, SD is generally an electrical death, related to myocardial disturbances in spite of severe **coronary** stenotic lesions. Ventricular fibrillation (FV) is associated with an early myocardial **infarction** or more frequently to coagulative myocytolysis (CM). Coagulative myocytolysis accompanies SD in 67, 88 and 95% of the cases, as. . . fibers are frequently found as terminal events of patients dying from non-cardiac diseases; they are not considered as useful for **diagnosis** of cardiac SD or for early acute myocardial **infarctions**. The study of the intrinsic cardiac nerves demonstrated a rich sympathetic perimiseal plexus and parasympathetic neurons. An inadequate local secretion. . .

IT Miscellaneous Descriptors
HUMAN EPINEPHRINE ACETYL **CHOLINE** VENTRICULAR FIBRILLATION MYO CARDIAL **INFARCTION** COAGULATIVE MYO CYTOLYSIS ISCHEMIA NECROSIS CARDIAC NERVES

RN 51-43-4 (EPINEPHRINE)
51-84-3 (ACETYL **CHOLINE**)

L2 ANSWER 38 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AB. . . xanthine derivatives (aminophylline, pentoxifylline and theophylline) were essentially inactive. Drugs that are capable of decreasing the volume of an experimental **infarction**, many of which are described as .alpha.-adrenolytic agents, contracted the isolated cerebrovascular smooth muscle. Their order of efficacy, based on the mean EAm values, was ifenprodil > vincamine > nicergoline > dihydroergotoxine > raubasine. It was considered worthwhile to **determine** whether the ifenprodil-induced vasoconstriction occurred when human, rather than cat, pial vessels were studied. Ifenprofil and vincamine contracted the human. . .

IT Miscellaneous Descriptors
HUMAN CAT THEOPHYLLINE IFENPRODIL AMINOPHYLLINE PENTOXIFYLLINE ACETYL **CHOLINE** 5 HYDROXY TRYPTAMINE PAPAVERINE NAFTIDROFURYL VIQUIDIL YC-93 2 6 DI METHYL-4-3-NITROPHENYL-1 4 DI HYDRO PYRIDINE-3 5-DICARBOXYLIC-ACID 3-2-N BENZYL-N-METHYLAMINOETHYL ESTER 5. . .

RN 50-67-9 (5 HYDROXY TRYPTAMINE)
51-84-3 (ACETYL **CHOLINE**)
58-55-9 (THEOPHYLLINE)
58-74-2 (PAPAVERINE)
84-55-9 (VIQUIDIL)
317-34-0 (AMINOPHYLLINE)
483-04-5 (RAUBASINE)
1617-90-9 (VINCAMINE)
6493-05-6 (PENTOXIFYLLINE)
11032-41-0 (DI HYDRO ERGOTOXINE)
23210-56-2 (IFENPRODIL)

. . .

L2 ANSWER 39 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AB. . . was injected while the cannula tip within SAN region, a slower P wave rhythm, rather than a JR, developed. To **determine** visually the injected under similar conditions. Dye-distribution patterns were consistent in all atria. These averaged 44 .+-. 2% of the. . . but widespread. Dye extended cranially, caudally and laterally and included documented subsidiary pacemaker sites. Dye approached, but never trespassed, the **coronary** sinus ostium. Cholinergic drug injection into the proximal SANA may suppress not only the SAN, but subsidiary atrial pacemakers as. . .

IT Miscellaneous Descriptors
DOG ACETYL **CHOLINE** EDROPHONIUM CARDIOVASCULAR-DRUG CHLORALOSE PENTO BARBITAL GENERAL ANESTHETIC

RN 51-84-3 (ACETYL **CHOLINE**)
76-74-4 (PENTO BARBITAL)
312-48-1 (EDROPHONIUM)
15879-93-3 (CHLORALOSE)

L2 ANSWER 40 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI FUNDAMENTAL PHYSIOLOGY OF **CORONARY** SMOOTH MUSCULATURE FROM EXTRAMURAL STEM ARTERIES OF PIGS AND RABBITS.
AB Isolated **coronary** smooth musculature originating from extramural stem arteries such as the descending branch of the left **coronary** artery of pigs and rabbits produced phasic contractions of absolutely constant strength over an observation period of many hours under appropriate conditions of electric field stimulation and mechanical stretch. This allowed in vitro **analysis** of all determinant factors which control vascular tone and contractility of this clinically important section of the **coronary** system. Active tension development primarily depends on the concentrations of those ions which are involved in excitation-contraction coupling of **coronary** smooth muscle according to the ratio: Ca/Mg, H. High Ca, Mg deficiency and alkalosis potentiate phasic contractility and basal tone. . . transmitters, sympathomimetic catecholamines, in contrast to their usual action on other arteries, tend to relax rather than to contract extramural **coronary** smooth muscle because the adrenergic .beta.-receptors prevail in this section of the **coronary** bed. Sympathetic transmitters here only elicit contractile responses if the .beta.-receptors have been blocked. Acetylcholine and related parasympathomimetic agents regularly produce in vitro spasms of the isolated **coronary** preparations. Dilation of the extramural **coronary** stem arteries will normally be induced by strong physical exercise, due to both an augmentation of sympathetic drive and a. . . and a somewhat higher blood pH preponderate. This may explain why, in patients with Prinzmetal's variant angina, the attacks of **coronary** spams occur mainly during sleep at night.
IT Miscellaneous Descriptors
CALCIUM MAGNESIUM CATECHOLAMINE POTASSIUM ACETYL **CHOLINE** NEURO TRANSMITTER ALKALOSIS ACIDOSIS BLOOD PH ANGINA **CORONARY** SPASM EXCITATION CONTRACTION ADRENERGIC BETA RECEPTORS VASO CONSTRICTION VASCULAR CONTRACTILITY
RN 51-84-3 (ACETYL **CHOLINE**)
7439-95-4 (MAGNESIUM)
7440-09-7 (POTASSIUM)
7440-70-2 (CALCIUM)

L2 ANSWER 41 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI THE CALCIUM ACCUMULATION IN A MICROSOMAL FRACTION FROM PORCINE **CORONARY** ARTERY SMOOTH MUSCLE A STUDY OF THE HETEROGENEITY OF THE FRACTION.
AB Microsomes prepared from the combined media and intima of pig **coronary** artery take up Ca2+ in an ATP-dependent way, stimulated by oxalate. Conditions were determined to optimize the preparation of the. . . for Ca2+ accumulation. Ca2+ accumulation occurs in the lumen of the vesicles even in the absence of oxalate. Density gradient **analysis** shows that the microsomal fraction is composed of vesicles that are heterogeneous in enzymatic composition, and have a low Ca2+ permeability. Apparently, adenylate cyclase is a predominantly plasma membrane-bound enzyme. Rotenone-insensitive NADH-cytochrome c reductase and **choline** phosphotransferase, 2 putative markers for internal membranes, gave distinct banding patterns on isopycnic centrifugation, indicating different intracellular localization. There was. . .
IT Miscellaneous Descriptors
PLASMA MEMBRANE ROTENONE METAB-DRUG ADENYLATE CYCLASE OXALATE ATP DEPENDENT NADH CYTOCHROME C REDUCTASE **CHOLINE** PHOSPHO TRANSFERASE DENSITY GRADIENT **ANALYSIS** CENTRIFUGATION
RN 56-65-5 (ATP)
58-68-4 (NADH)

83-79-4 (ROTENONE)
338-70-5 (OXALATE)
7440-70-2 (CALCIUM)
9026-13-5 (**CHOLINE** PHOSPHO TRANSFERASE)
9037-80-3 (REDUCTASE)
9074-90-2 (CYCLASE)

L2 ANSWER 42 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AB To **determine** whether orally administered propranolol contributes to untoward hemodynamic function during general anesthesia, patients undergoing myocardial revascularization were divided into 2. . . general anesthesia with thiopental-succinylcholine-nitrous oxide-halothane and pancuronium does not appear to lead to unusual hemodynamic function in patients who have **coronary**-artery disease.
IT Miscellaneous Descriptors
HUMAN SERUM THIOPENTAL SUCCINYL **CHOLINE** NITROUS OXIDE HALOTHANE PANCURONIUM MORPHINE SCOPOLAMINE MYO CARDIAL RE VASCULARIZATION SURGERY CARDIAC OUTPUT MEAN ARTERIAL PRESSURE STROKE VOLUME SYSTEMIC PERIPHERAL. . .
RN 51-34-3 (SCOPOLAMINE)
57-27-2 (MORPHINE)
76-75-5 (THIOPENTAL)
151-67-7 (HALOTHANE)
306-40-1 (SUCCINYL **CHOLINE**)
525-66-6 (PROPRANOLOL)
10024-97-2 (NITROUS OXIDE)
15500-66-0 (PANCURONIUM)

L2 ANSWER 43 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI DETERMINATION OF **CHOLINE** ESTERASE EC-3.1.1.8 ACTIVITY.
IT Miscellaneous Descriptors
ORGANO PHOSPHORUS INTOXICATION ACETYL CHOLIN ESTERASE EC-3.1.1.7 MYO CARDIAL **INFARCTION DIAGNOSIS**
RN 7723-14-0 (PHOSPHORUS)
9000-81-1 (EC-3.1.1.7)
9001-08-5 (**CHOLINE** ESTERASE)
9001-08-5 (CHOLIN ESTERASE)
9001-08-5 (EC-3.1.1.8)

L2 ANSWER 44 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI COMPARISON OF THE RELAXING EFFECT OF DOPAMINE WITH THAT OF ADENOSINE ISOPROTERENOL AND ACETYL **CHOLINE** IN ISOLATED CANINE **CORONARY** ARTERIES.
IT Miscellaneous Descriptors
PROSTAGLANDIN F-2-ALPHA PHENOXYBENZAMINE PROPRANOLOL ATROPINE AMINOPHYLLINE CARDIO VASC-DRUGS KINETIC **ANALYSIS** CYCLIC AMP
RN 51-55-8 (ATROPINE)
51-61-6 (DOPAMINE)
51-84-3 (ACETYL **CHOLINE**)
58-61-7 (ADENOSINE)
59-96-1 (PHENOXYBENZAMINE)
60-92-4 (CYCLIC AMP)
317-34-0 (AMINOPHYLLINE)
525-66-6 (PROPRANOLOL)
551-11-1 (PROSTAGLANDIN F-2-ALPHA)
7683-59-2 (ISOPROTERENOL)

=> d l2 4, 5, 9, 14, 30, 31, 34, 43 ibib, iabs

L2 ANSWER 4 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
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TITLE: Multi-variate **analysis** predicts clinical outcome 30 days after middle cerebral artery **infarction**.

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SUMMARY LANGUAGE: English
ABSTRACT:
Background and purpose: To evaluate the functional prognostic value of proton magnetic resonance spectroscopy performed within the 5 days of an ***infarction*** of the middle cerebral artery territory, compared with previously demonstrated prognostic factors. Methods: Proton magnetic resonance spectroscopy was performed on 77 consecutive non-comatosed patients during the acute stage of middle cerebral artery **infarction**. The functional status was determined for each patient via the Orgogozo score. Proton magnetic resonance spectroscopic data were acquired in the **infarction** and in contra-lateral normal tissue and the results were expressed as metabolite ratios. Correlations were evaluated between the Orgogozo score at day 1 and day 30, the age, the sex, the volume of the **infarction**, and the metabolic ratios. Results: In a monovariate **analysis**, the decrease of the NAA/***choline*** ratio was correlated with a low Orgogozo score at days 1 and 30 ($P < 0.05$) and with a large **infarction** ($P < 0.05$). A stepwise ***analysis*** showed a significant relationship between the Orgogozo score at day 30 and the Orgogozo score at day 1, the sex, the volume of ***infarction*** , and the NAA/Cho ratio within the **infarction**. Conclusions: Our work demonstrates that a good clinical outcome at day 30 depends on a good initial clinical score at day 1, a small volume of ***infarction*** , a small decrease of NAA/Cho, and being of the female gender.

L2 ANSWER 5 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1999:466771 BIOSIS
DOCUMENT NUMBER: PREV199900466771
TITLE: Measurement of initial N-acetyl aspartate concentration by magnetic resonance spectroscopy and initial infarct volume by MRI predicts outcome in patients with middle cerebral artery territory **infarction**.
AUTHOR(S): Pereira, Anthony C. (1); Saunders, Dawn E.; Doyle, Victoria L.; Bland, J. Martin; Howe, Franklyn A.; Griffiths, John R.; Brown, Martin M. (1)
CORPORATE SOURCE: (1) Institute of Neurology, Queen Square, London, WC1N 3BG UK
SOURCE: Stroke, (Aug., 1999) Vol. 30, No. 8, pp. 1577-1582.
ISSN: 0039-2499.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English
ABSTRACT:
Background and Purpose-1H MR spectroscopy can be used to study biochemical changes occurring in the brain in stroke. We used it to examine the relationship between metabolite concentration (N-acetyl aspartate (NAA), lactate, **cholines** and creatines), size of infarct, clinical deficit, and 3-month clinical outcome in patients with middle cerebral artery (MCA) territory **infarction**. Methods-Thirty-one patients with acute MCA territory **infarction** were recruited within 72 hours of the onset of symptoms. Single-voxel short echo time stimulated echo acquistion mode spectroscopy was used to obtain metabolite data from the infarct core. Metabolite concentrations were determined with use of variable projection time domain-fitting **analysis**. Infarct size was determined with T2-weighted images. Patient outcome groups at 3 months were "independent," "dependent," or

"dead." Results-All patients (100%; 95% CI 75% to 100%) who had an infarct >70 mL did poorly. Eighteen of 20 patients (90%; 95% CI68% to 99%) with a core NAA concentration <7 mmol/L did poorly at 3 months, whereas 7 of 11 patients (64%; 95% CI 31% to 89%) with an initial NAA concentration >7 mmol/L did well. Combining these results showed that all patients who had an initial infarct volume >70 mL did poorly, irrespective of the NAA concentration. Of those patients with infarcts <70 mL, those who had a core NAA concentration >7 mmol/L did well (88%; 95% CI 47% to 100%), whereas those with a lower NAA concentration did poorly (80%; 95% CI 44% to 97%). There was no association between other metabolite concentrations and outcome. Conclusions-Infarct volume and NAA concentration can together predict clinical outcome in MCA ***infarction*** in humans.

L2 ANSWER 9 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1996:423057 BIOSIS
DOCUMENT NUMBER: PREV199699154113
TITLE: Accessibility of human apolipoprotein B-100 epitopes in insulin-dependent diabetes: Relation with the surface lipid environment of atherogenic particles.
AUTHOR(S): Ziegler, O.; Mejean, L.; Igau, B.; Fruchart, J.-C.; Drouin, P.; Fievet, C. (1)
CORPORATE SOURCE: (1) SERLIA INSERM U325, Inst. Pasteur, F-59019 Lille Cedex France
SOURCE: Diabetes & Metabolism, (1996) Vol. 22, No. 3, pp. 179-184.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English; French
ABSTRACT:
The physicochemical modifications (composition and conformation) of lipoproteins containing apolipoprotein B-100 (apo B-100) were studied in normocholesterolaemic adequately controlled Type I insulin-dependent diabetic patients. Thirty-one normocholesterolaemic (serum cholesterol lt 6.50 mmol/l) diabetic male patients and 31 age- and body mass index-adjusted healthy normolipaemic male controls were studied. Cholesterol and **choline** -containing phospholipids were measured in total serum and two lipoprotein subfractions containing or not apo B (LpB and LpnoB respectively). These subfractions were separated by precipitation with concanavalin A. Total apo B-100 and two lipoprotein particles defined according to their apo B-100 epitope accessibility were determined using respectively anti-apo B polyclonal and two monoclonal antibodies that reacted with specific epitopes on the apo B molecule. Despite a classical lipid profile (cholesterol and triglyceride levels), which was quite normal in plasma from patients as compared to controls, a depletion of **choline**-containing phospholipid content in serum and more specifically in LpB particles was observed in diabetic patients. Decreased cholesterol content was also observed in LpB particles. Immunological ***analysis*** demonstrated an increased number of lipoprotein particles (a condition previously related to **coronary** artery disease) and decreased immunoaccessibility of a conformationally expressed apo B-100 epitope. These conformational changes were correlated with modifications of the surface phospholipid environment of LpB particles. It is concluded that subtle abnormalities in the composition and conformation of atherogenic apo-B-containing lipoproteins occur in Type 1 diabetes mellitus. These structural modifications may be one factor accounting for the increased rate of atherosclerosis in diabetes, despite the existence of a normal classical lipid profile.

L2 ANSWER 14 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1995:357223 BIOSIS
DOCUMENT NUMBER: PREV199598371523
TITLE: Prognostic value of platelet function disturbances in patients with unstable angina (results of one year follow-up.
AUTHOR(S): Shalaev, S. V.; Mezhetskaya, I. A.; Zhuravleva, T. D.; Arkhangel'skaya, T. A.; Kiyanyuk, N. S.; Volkov, N. Z.
CORPORATE SOURCE: Res. Inst. Clin. Prev. Cardiol., Sib. Div., Russ. Acad.

Med. Sci., Tyumen Russia
SOURCE: Kardiologiya, (1995) Vol. 35, No. 1, pp. 9-13.
ISSN: 0022-9040.
DOCUMENT TYPE: Article
LANGUAGE: Russian
SUMMARY LANGUAGE: Russian; English
ABSTRACT:
With the aim of a search for possible platelet related predictors of myocardial ***infarction*** development in unstable angina multifactorial discriminant ***analysis*** of relationship of platelet function characteristics to results of one year follow-up of 121 patients was performed. Nineteen parameters reflecting various platelet functions - aggregation in vivo and in vitro, lipid composition of and lipid peroxidation in platelets were included into **analysis**. The following 4 parameters had discriminating power in relation to myocardial **infarction** development (n=37) and sudden death (n=3) during follow-up: lipid peroxidation products (diene conjugates), free cholesterol fraction and platelet phospholipids - phosphatidyl **choline** and sphingomyelin. Frequency of correct retrospective predictions when all these parameters were included into model was 70%. Best coincidence of predicted and observed results of follow up (76%) was achieved with the use of 3 parameters - free cholesterol, phosphatidyl **choline** and sphingomyelin in platelets.

L2 ANSWER 30 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1987:356120 BIOSIS
DOCUMENT NUMBER: BA84:53523
TITLE: HIGH DENSITY LIPOPROTEIN FREE CHOLESTEROL AND OTHER LIPIDS IN **CORONARY** HEART DISEASE.
AUTHOR(S): MOSHIDES J S
CORPORATE SOURCE: DEP. CLIN. CHEM., PRINCE OF WALES HOSP., RANDWICK N.S.W. 2031, AUST.
SOURCE: ARTERIOSCLEROSIS, (1987) 7 (3), 262-266.
CODEN: ARTRDW. ISSN: 0276-5047.
FILE SEGMENT: BA; OLD
LANGUAGE: English
ABSTRACT:
The cholesterol and **choline**-containing phospholipid fractions of high density lipoproteins (HDL) were determined in healthy males and in male patients with **coronary** heart disease (CHD) to ascertain which HDL parameter or combined parameters possess the greatest discriminative power. The free cholesterol fraction (HDL-fc) was found to be the most significant discriminator between controls and males with CHD, the mean levels (.+-. SEM) being 6.6 (.+-. 0.9) and 4.4 (.+-. 0.6) mg/dl, respectively. Classification of CHD patients and controls using one-variable discriminant function ***analysis*** (DFA) yielded an error rate of 27% for plasma HDL-fc. Two variable DFA using both the HDL esterified cholesterol levels and the HDL-fc levels of controls and patients reduced the error rate to 11%. The results obtained in this study indicate a possible role for HDL-fc as a predictor of CHD risk.

L2 ANSWER 31 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1986:149681 BIOSIS
DOCUMENT NUMBER: BA81:60097
TITLE: TIME COURSE OF CHANGES IN CANINE MYOCARDIAL PLASMALOGEN LEVELS DURING **INFARCTION**.
AUTHOR(S): NISHIDA K
CORPORATE SOURCE: FOURTH DEPARTMENT INTERNAL MEDICINE, JIKEI UNIVERSITY SCHOOL MEDICINE.
SOURCE: TOKYO JIKEIKAI MED J, (1985) 100 (5), 955-964.
CODEN: TJIDAH. ISSN: 0375-9172.
FILE SEGMENT: BA; OLD
LANGUAGE: Japanese
ABSTRACT:
The 1-alk-1'-enyl-2-acyl-sn-glycerophospholipids (plasmalogens) are major components of the myocardial phospholipids. This study was performed to

determine the early metabolic effect of myocardial ischemia on plasmalogen. Canine **coronary** artery was occluded by injection of agar gel into the left anterior descending artery using Sones catheter. The heart was removed at 30 min., 1 hr., 3 hr., 6 hr, and 24 hr. after the occlusion. The total phospholipid content remained constant throughout the early phase of acute ischemia, but the plasmalogen content fell by 9% after 30 min, as compared with control area. Phospholipid ocmposition of ischemic myocardium at 1, 3 and 6 hr, decreased by only 10% in the major fractions (phosphatidyl ***choline*** , phosphatidyl ethanolamine and **choline** plasmalogen), while ethanolamine plasmalogen decreased by 18%, 22% and 20% at 1, 3 and 6 hr. respectively. The sn-2 hydroxyl of etanolamine plasmalogens is esterified to highly poly-unsaturated fatty acids which would contribute to maintaining the structure and metabolic stability of myocardial membrane by competitively inhibiting the hydrolysis of the diacyl phospholipids.

L2 ANSWER 34 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1983:255091 BIOSIS
DOCUMENT NUMBER: BA76:12583
TITLE: LOW DIETARY INTAKE OF LINOLEIC-ACID PREDISPOSES TO MYO CARDIAL **INFARCTION**.
AUTHOR(S): SIMPSON H C R; BARKER K; CARTER R D; CASSELS E; MANN J I
CORPORATE SOURCE: DIABETES RESEARCH LABORATORIES DEP. COMMUNITY MED. GENERAL PRACTICE, GIBSON LABORATORIES BUILD., UNIV. OXFORD.
SOURCE: BR MED J, (1982 (RECD 1983)) 285 (6343), 684.
CODEN: BMJOAE. ISSN: 0007-1447.
FILE SEGMENT: BA; OLD
LANGUAGE: English
ABSTRACT:
Men (32) who had recently had a myocardial **infarction** were matched individually for age with controls who had no evidence of heart disease. The patients had a significantly lower proportion of linoleic acid and a higher proportion of palmitic acid in their plasma triglyceride fatty acids. ***Analysis*** of the composition of red-cell membrane phosphatidyl ***choline*** , which reflects long-term dietary fat intake, showed a significantly lower proportion of linoleic acid in the patients.

L2 ANSWER 43 OF 44 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1978:83330 BIOSIS
DOCUMENT NUMBER: BR15:26830
TITLE: DETERMINATION OF **CHOLINE** ESTERASE EC-3.1.1.8 ACTIVITY.
AUTHOR(S): SIVORINOVSKII G A
SOURCE: Lab. Delo, (1977) 2, 92-94.
CODEN: LABDAZ. ISSN: 0023-6748.
FILE SEGMENT: BR; OLD
LANGUAGE: Unavailable

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